## **NPOL Imagery from MC3E**

These directories contain images of quality controlled and calibrated radar data taken by NPOL during the MC3E field campaign (04/22/2011 – 06/02/2011). The data are written to tar files by date, with one tar file containing all of the PPI, PPI Sector and RHI scans for a given day. The QC'd/Calibrated data are available in the incoming/npol/QC\_Cal\_UF directory.

The images were created using the IDL port NASA's Radar Software Library (RSL) known as RSL\_in\_IDL

RSL: <a href="http://trmm-fc.gsfc.nasa.gov/trmm\_gv/software/rsl/index.html">http://trmm-fc.gsfc.nasa.gov/trmm\_gv/software/rsl/index.html</a>

RSL\_in\_IDL: http://trmm-fc.gsfc.nasa.gov/trmm\_gv/software/rsl\_in\_idl/RSL\_in\_IDL.html

The daily tar files are named using the following nomenclature:

mc3e\_npol\_2011\_**mmdd**\_images.tar, where **mmdd** is month and day. Each daily tar file contains subdirectories by field type:

Table 1. Description of fields for which NPOL imagery is available

| Field Name | Units                | Description                                  |
|------------|----------------------|--|
| CZ         | dBZ                  | Quality controlled, calibrated reflectivity  |
| DR         | dB                   | Differential reflectivity                    |
| KD         | deg km <sup>-1</sup> | Specific differential phase                  |
| PH         | deg                  | Differential phase                           |
| RH         | None                 | Cross correlation                            |
| VR         | m s <sup>-1</sup>    | Radial velocity                              |
| ZT         | dBZ                  | Original (no QC or calibration) reflectivity |

The individual plot files are named using the following name convention:

npol1\_YYYY\_MMDD\_HHMMSS\_FF\_swSS\_TTT.png

where,

YYYY = 2011

**MMDD** = month and day

**HHMMSS** = hour, minute and second of the beginning of the scan

**FF** is the field (see Table 1)

**SS** is the sweep number (sweeps 1 and 2 are available for PPS scans)

**TTT** is the scan type (Plan Position Indicator (PPI) or Range Height Indicator (RHI)

Figure 1 shows an example PPI plot of CZ for 04/25/2011 @ 09:56:30 UTC

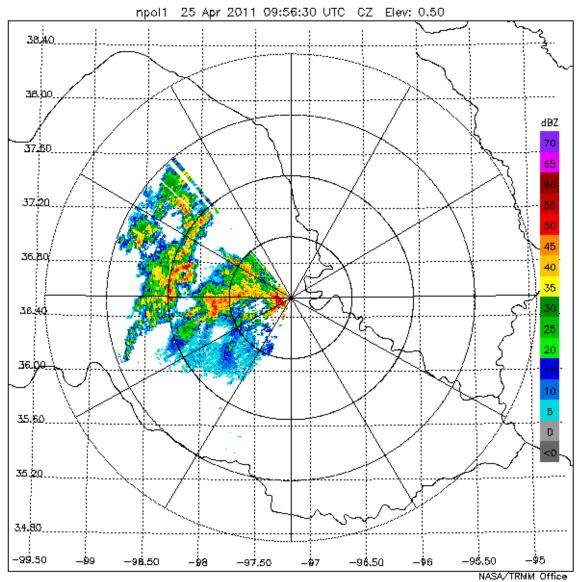


Fig. 1: Sample plot of a quality controlled and calibrated reflectivity PPI from NPOL for the scan beginning at 09:56:30 UTC on 04/25/2011.

Figure 2 provides an example RHI Plot taken shortly after the plot in Figure 1.

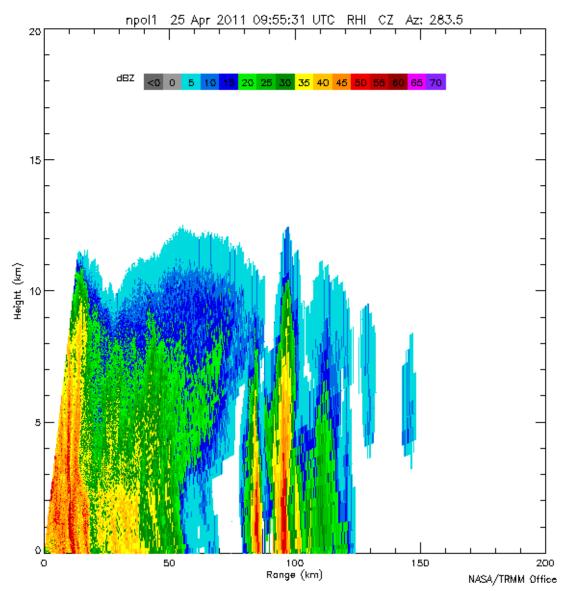


Fig. 2: Sample plot of a quality controlled and calibrated reflectivity RHI from NPOL for the scan beginning at 09:55:31 UTC on 04/25/2011.

## Contact Information

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